

(a) a handpiece having a tool supporting end, and a battery receiving end with an alignment post extending therefrom, the battery receiving end of the handpiece also having a set of electrical contact elements arranged in generally concentric relation to the alignment post;

(b) a single use, disposable battery pack having an attachment end with a central opening therein, and a set of mating electrical contact elements arranged in a generally circular configuration concentric to the central opening;

(c) the sets of mating contacts being adapted to come into a mutually concentric relation in response to insertion of the alignment post into the central opening;

(d) the sets of contacts upon rotation of the battery pack relative to the handpiece being adapted to then become lockingly and conductively interengaged in a predetermined relative position; and

(e) means indicating by at least one of sight, sound, and touch that the predetermined relative position has been achieved.

5. (Amended) A surgical instrument for performing a cutting, shaping, or drilling operation on bone or hard tissue, comprising:

(a) a handpiece having a battery receiving end with an alignment post extending therefrom;

(b) a sterile package containing a single use, disposable battery pack which has an attachment end with a central opening therein;

(c) the central opening in the single use, disposable battery pack being adapted to insertably receive the alignment post so as to establish a mutual alignment axis of handpiece and battery pack;

(d) the battery receiving end of the handpiece and the attachment end of the single use, disposable battery pack having flat end surfaces adapted for abutting engagement while yet allowing relative rotation of the battery pack relative to the handpiece;

(e) the battery receiving end of the handpiece and the attachment end of the single use, disposable battery pack having mating sets of electrical contact elements, each set being arranged generally concentric to the mutual alignment axis; and

(f) wherein upon the insertion of the alignment post of the handpiece into the opening of the battery pack, the sets of mating contacts are adapted to then become lockingly and conductively interengaged in response to rotation of the battery pack relative to the handpiece.